

LEYH ET AL.
"Multi-Mode Communications Device With
Continuous Mode ..."
Atty. Docket No. CS11235

Appl. No. 10/027,650
Confirm. No. 1167
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REMARKS

Request for Reconsideration, Informal Matters, Claims Pending

The fourth non-final Office action mailed on 16 June 2004 has been considered carefully. Reconsideration of the claimed invention in view of the amendments above and the discussion below is respectfully requested.

The claims have been amended for consistent use of the term "communication" rather than communications, though the terms are used interchangeably in the Description. Other amendments are discussed further below.

Claims 4, 5, 7 and 15 were indicated as being allowable.

Claims 1, 3-7, 10-17 and 20-27 are pending.

Allowability of Claims Over Byrne & Vaisanen

Rejection Summary

Claims 1, 3, and 6 stand rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 4,761,822 (Maile). Office Action, 16 June 2004, para. 7.

Patentability of Claim 1

Regarding independent Claim 1, contrary to the Examiner's assertion, Maile fails to disclose or suggest a

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... wireless communications handset, comprising:
a first transceiver having a first receiver and a first transmitter;
a first antenna coupled to the first receiver;
a second transceiver having a second receiver and a second transmitter;
a second antenna coupled to the second receiver,
the first and second transmitters connectable at the same time to the same one of either of the first and second antennas.

Claim 1 has been amended to recite a wireless communications "handset" thus distinguishing it from the cordless base station architecture of Maile. Support the amendment is on page 2: 24 – page 3: 3. Maile discloses a cordless telephone base station architecture including a branched antenna arrangement wherein the multiple transceivers (26) are switched between antennas (22 & 24) by selector (28) in FIG. 2 or switch (30) in FIG. 3. Also, in Maile, the first and second transceivers (26) are coupled to one or the other of the antennas (22, 24). Claim 1 is therefore patentably distinguished over Maile.

Discussion of Patentability of Claim 3

Regarding Claim 3, contrary to the Examiner's assertion, Maile fails to disclose or suggest a wireless communications handset including "...first and second transmitters disconnectable from the same one of the first and second antennas" in combination with the limitations of Claim 1. Claim 3 is further patentably distinguished over Maile.

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Discussion of Patentability of Claim 6

Regarding Claim 6, contrary to the Examiner's assertion, Maile fails to disclose or suggest a wireless communications handset including a "... switch coupling the first and second transmitters and the second receiver to the same one of the first and the second antennas" in combination with the limitations of Claim 1. Claim 6 is further patentably distinguished over Maile.

Allowability of Claims Over Auvray

Rejection Summary

Claim 16 stands rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 5,564,076 (Auvray). Office Action, 16 June 2004, para. 8.

Patentability of Claim 16

Independent Claim 16 has been amended to include limitations of dependent Claim 17, rendering the rejection based on Auvray moot.

Allowability of Claims Over Vaisanen & Wang

Rejection Summary

Claims 10, 11 and 14 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,606,311 (Vaisanen) in view of U.S. Patent

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No. 6,606,311 (Wang). Office Action, 16 June 2004, para. 9. The Examiner concedes that Vaisanen fails to disclose "... receiving an uncompressed CDMA signal", but asserts that Wang meets the deficiency of Vaisanen.

Patentability of Claim 10

Regarding independent Claim 10, contrary to the Examiner's assertion, Vaisanen and Wang do not suggest a

... method in a wireless communications handset having a first transceiver and a second transceiver, comprising:

receiving an uncompressed CDMA signal with a first receiver of the first transceiver;

receiving a second signal with a second receiver of the second transceiver at the same time the first receiver is receiving the uncompressed CDMA signal.

Contrary to the Examiner's contention, there is no suggestion in either Vaisanen to receive an uncompressed CDMA signal while receiving a second signal. Vaisanen discloses Bluetooth and WLAN transceivers. Wang discloses a quality of service (QOS) framework for CDMA 2000 networks. The Examiner's reference to passages of Wang are misplaced. At col. 2; 1-4, Wang merely defines ATM standards QOS. At col. 3; 7-13, Wang discloses that an object of the invention is to provide QOS in CDMA communications system. Wang discloses nothing about uncompressed CDMA. As noted, known GSM/WCDMA handset architectures rely upon WCDMA compression to provide time for GSM communications. The Examiner has not cited any support in the prior art for the putative combination. Claim 10 and the claims

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that depend therefrom are thus patentably distinguished over Vaisanen and Wang.

Discussion of Patentability of Claim 11

Regarding Claim 11, contrary to the Examiner's assertion, Byrne, Beasley and Wang do not suggest, in combination with the limitations of Claim 10,

... receiving the second signal with the second receiver operating in a non-continuous reception mode at the same time the first receiver is receiving the uncompressed CDMA signal.

As noted, Vaisanen discloses dual mode Bluetooth and WLAN transceivers and Wang merely discloses a QOS framework for CDMA 2000. The proposed combination/modification would not further the objects of any of the references cited. Claim 11 and the claims that depend therefrom are thus further patentable distinguished over the art.

Discussion of Patentability of Claim 14

Regarding Claim 14, contrary to the Examiner's assertion, Byrne, Beasley and Wang do not suggest "... receiving a second uncompressed downlink signal with the second receiver operating in a continuous reception mode at the same time the first receiver is receiving the uncompressed CDMA signal" in combination with the limitations of Claim 10. The proposed

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combination/modification would not further the objects of any of the references cited. Claim 14 is thus further patentably distinguished over the art.

Allowability of Claims Over Byrne, Beasley & Wang

Rejection Summary

Claims 12 and 13 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,606,311 (Vaisanen) in view of U.S. Patent No. 6,606,311 (Wang) and U.S. Patent No. 6,606,311 (Byrne). Office Action, 16 June 2004, para. 10. The Examiner relies upon Byrne for teaching a GSM receiver.

Discussion of Patentability of Claim 12

Regarding Claim 12, contrary to the Examiner's assertion, Vaisanen, Wang and Byrne do not suggest "... receiving a downlink signal with the GSM receiver at the same time the CDMA receiver is receiving the uncompressed CDMA signal" in combination with the limitations of Claim 10. Vaisanen discloses dual mode WLAN/Bluetooth device. Byrne discloses GSM and DECT transceivers, which are both TDM based communication technologies. Wang merely discloses a QOS framework for CDMA 2000. The Examiner has not provided any motivation for combine the references cited. Moreover, the proposed combination/modification would not further the objects of any of the references. Claim 12 is thus further patentably distinguished over the art.

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Discussion of Patentability of Claim 13

Regarding Claim 13, contrary to the Examiner's assertion, Byrne, Beasley and Wang do not suggest "... the first receiver is CDMA receiver, the second receiver is a TDMA receiver, receiving a downlink signal with the TDMA receiver at the same time the CDMA receiver is receiving the uncompressed CDMA signal" in combination with the limitations of Claim 10. The Examiner has not provided any motivation for combine the references cited. Moreover, the proposed combination/modification would not further the objects of any of the references cited. Claim 13 is thus further patentably distinguished over the art.

Allowability of Claims Over Auvray & Wang

Rejection Summary

Claim 17 stands rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,564,076 (Auvray) and U.S. Patent No. 6,606,311 (Wang). Office Action, 16 June 2004, para. 10.

Discussion of Patentability of Claim 17

Regarding Claim 17, contrary to the Examiner's assertion, Auvray and Wang do not suggest "... receiving the first signal with the first receiver includes receiving an uncompressed CDMA downlink signal" in combination with the limitations of Claim 16. The Examiner's reference to passages of Wang are misplaced. At col. 2; 1-4, Wang merely defines ATM standards QOS.

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At col. 3: 7-13, Wang discloses that an object of the invention is to provide QOS in CDMA communications system. Wang discloses nothing about uncompressed CDMA. As noted, known GSM/WCDMA handset architectures rely upon WCDMA compression to provide time for GSM communications. The asserted combination/modification has no relation to the objects of any of the references cited. Claim 17 is thus further patentably distinguished over the prior art.

Allowability of Claims Over Byrne & Poirier

Rejection Summary

Claims 20-21 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,373,703 (Byrne) in view of U.S. Patent No. 6,341,219 (Poirier). Official Action, 16 June 2004, para. 12. The Examiner relies upon Poirier for teaching the use of spread spectrum to implement an "... increasingly popular transmission scheme ... with a power control scheme that ... provides optimal output power control." Id.

Patentability of Claim 20

Regarding independent Claim 20, contrary to the Examiner's assertion, Byrne fails to disclose or suggest a

... method in a wireless communications device having a first transceiver and a second transceiver, comprising:

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transmitting a first signal with a first transmitter of the first transceiver operating in a continuous spread spectrum transmission mode,
the first transmitter coupled to a first antenna;
receiving a second signal with a second receiver of the second transceiver at the same time the first transmitter is transmitting the first signal,
the second receiver coupled to a second antenna different than the first antenna.

Byrne discloses a multi-mode communication device that uses GSM cellular and DECT cordless telephone protocols, both of which employ time division duplexing (TDD) implemented by burst mode transmission. Neither GSM nor DECT protocol communications employ "... continuous spread spectrum transmission mode ..." operation. WCDMA is an exemplary spread spectrum modulation format. GSM is a time division format. The disclosure of a CDMA power control scheme by Poirier suggest nothing about multimode handset architectures as asserted by the Examiner. The alleged combination/modification has no relation to the objects of any one of the references cited. Claim 20 and the claims that depend therefrom are thus patentably distinguished over Byrne and Poirier.

Patentability of Claim 21

Regarding Claim 21, contrary to the Examiner's assertion, Byrne and Beasley do not suggest, in combination with the limitations of Claim 20,

... the first transmitter is CDMA transmitter, the second receiver is a TDMA receiver, transmitting an uplink signal with the CDMA transmitter; receiving the second signal with the TDMA receiver

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at the same time the CDMA transmitter is transmitting the uplink signal.

Byrne discloses a multi-mode communication device that uses GSM cellular and DECT cordless telephone protocols, both of which employ time division duplexing (TDD) implemented by burst mode transmission. The GSM nor DECT transceivers of Byrne do not employ "... continuous transmission mode ..." operation. The disclosure of a CDMA power control scheme by Poirier suggest nothing about multimode handset architectures as asserted by the Examiner. The alleged combination/modification has no relation to the objects of any one of the references cited. Claim 21 is thus further patentably distinguished over Byrne and Beasley.

Allowability of Claims Over Byrne, Poirier & Wang

Rejection Summary

Claims 22 and 23 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,373,703 (Byrne) in view of U.S. Patent No. 6,341,219 (Poirier) and U.S. Patent No. 6,606,311 (Wang). Office Action, 16 June 2004, para. 13. However, the Examiner does not specify how Poirier supports the rejection.

Patentability of Claim 22

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Regarding Claim 22, contrary to the Examiner's assertion, Byrne, Poirier and Wang do not suggest, in combination with the limitations of Claim 20,

... transmitting an uncompressed uplink signal with a first transmitter operating in a continuous transmit mode;
receiving the second signal with the second receiver at the same time the first transmitter is transmitting the uncompressed uplink first signal.

There is no suggestion to combine the CDMA transceiver Wang with the GSM/DECT device if Byrne. The mere existence in the prior art of the CDMA cordless phone of Wang does not suggest replacing the DECT transceiver of Byrne with the CDMA cordless transceiver of Beasley. Moreover the putative modification does not comport with the object of Byrne and Wang. Byrne is concerned with communicating using GSM and DECT transceivers during handover periods, and Wang is concerned with QOS architectures for CDMA 2000, not dual mode devices. Claim 22 is thus further patentably distinguished over Byrne and Shaffer.

Discussion of Patentability of Claim 23

Regarding Claim 23, contrary to the Examiner's assertion, Byrne, and Wang do not suggest, in combination with Claim 20,

... the first transmitter is CDMA transmitter, the second receiver is a TDMA receiver, transmitting an uncompressed uplink signal with the CDMA transmitter;

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receiving the second signal with the TDMA receiver at the same time the CDMA transmitter is transmitting the uncompressed uplink signal.

There is no suggestion to combine the CDMA transceiver Wang with the GSM/DECT device of Byrne. The mere existence in the prior art of the CDMA cordless phone of Wang does not suggest replacing the DECT transceiver of Byrne with the CDMA cordless transceiver of Beasley. Moreover the putative modification does not comport with the object of Byrne and Wang. Byrne is concerned with communicating using GSM and DECT transceivers during handover periods, and Wang is concerned with QOS architectures for CDMA 2000, not dual mode devices. Claim 23 is thus further patentably distinguished over the art.

Allowability of Claims Over Byrne & Poirier

Rejection Summary

Claims 24 and 26 stand rejected under 35 USC 103 as being unpatentable over Byrne in view of U.S. Patent No. 6,341,219 (Poirier). Office Action, 16 June 2004, para. 14.

The Examiner concedes that Byrne "... does not teach receiving at the same time as transmitting...", but alleges that it would have been obvious to "... combine Byrne with the teachings of Poirier et al of receiving at the same time as transmitting to implement an increasingly popular transmission scheme ... with a power control scheme that utilizes a single control signal and

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provides optimal output power control. Office Action, 8 January 2004, para. 11.

Patentability of Claim 24

Regarding independent Claim 24, contrary to the Examiner's assertion, Byrne and Poirier fail to disclose or suggest a

... method in a wireless communications device having a first transceiver and a second transceiver, the method comprising:
transmitting with a first transmitter of the first transceiver;
transmitting with a second transmitter of the second transceiver at the same time that the first transmitter is transmitting;
receiving with one of a first receiver of the first transceiver and a second receiver of the second transceiver at the same time the first and second transmitters are transmitting.

There is no suggestion to combine the GSM/DECT cordless phone of Byrne with the CDMA power control scheme of Poirier. Byrne discloses providing seamless handover by simultaneously communicating using GSM and DECT transceivers during handover periods. Poirier is concerned with power control in a CDMA handset. As noted previously, prior GSM/WCDMA handset architectures rely upon WCDMA compression to provide time for GSM communications. The Examiner has not cited any support in the prior art for the putative combination. The alleged combination/modification has no relation to the objects of any one of the references cited. Claim 24 and any claims dependent therefrom are thus patentably distinguished over Byrne and Poirier.

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Patentability of Claim 26

Regarding independent Claim 26, contrary to the Examiner's assertion, Byrne and Poirier fail to disclose or suggest a

... method in a wireless communications device having a first transceiver and a second transceiver, the method comprising:
receiving with a first receiver of the first transceiver;
receiving with a second receiver of the second transceiver at the same time that the first receiver is receiving;
transmitting with one of a first transmitter of the first transceiver and a second transmitter of the second transceiver at the same time the first and second receivers are receiving.

Contrary to the Examiner's assertion, there is no suggestion to combine the GSM/DECT cordless phone of Byrne with the CDMA power control scheme of Poirier. Byrne discloses providing seamless handover by simultaneously communicating using GSM and DECT transceivers during handover periods. Poirier is concerned with power control in a CDMA handset. Prior GSM/WCDMA handset architectures rely upon WCDMA compression to provide time for GSM communications. The Examiner has not cited any support in the prior art for the putative combination. The alleged combination/modification has no relation to the objects of any one of the references cited. Claim 26 and any claims dependent therefrom are thus patentably distinguished over Byrne and Poirier.

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Allowability of Claims Over Byrne Poirier & Shaffer

Rejection Summary

Claims 25 and 27 stand rejected under 35 USC 103 as being unpatentable over Byrne, Poirier and Shaffer. Office Action, 16 June 2004, para. 15.

Discussion of Patentability of Claim 25

Regarding Claim 25, contrary to the Examiner's assertion, Byrne, Poirier and Shaffer do not suggest, in combination with the limitations of Claim 24, "... receiving includes receiving an uncompressed continuous signal". The use of uncompressed video data in Shaffer is not relevant to transmitting uncompressed CDMA. Shaffer uses compressed video to reduce data size, and there is no reason to combine the CDMA power controller of Poirier with the GSM/DECT handset of Byrne. Moreover, the asserted combination/modification has no relation to the objects of any of the references cited. Claim 25 is thus further patentably distinguished over Byrne, Poirier and Shaffer.

Discussion of Patentability of Claim 27

Regarding Claim 27, contrary to the Examiner's assertion, Byrne, Poirier and Shaffer do not suggest "... receiving includes receiving an uncompressed continuous signal" in combination with the limitations of Claim

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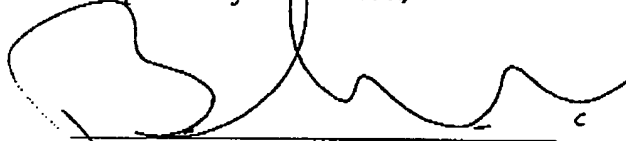
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26. The asserted combination/modification has no relation to the objects of any of the references cited. Claim 27 is thus further patentably distinguished over Byrne and Shaffer.

Prayer For Relief

In view of any amendments and the discussion above, the Claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

Respectfully submitted,



ROLAND K. BOWLER II 17 SEPT. 2004
REG. NO. 33,477

MOTOROLA, INC.
INTELLECTUAL PROPERTY DEPT. (RKB)
600 NORTH U.S. HIGHWAY 45, AN475
LIBERTYVILLE, ILLINOIS 60048

TELEPHONE NO. (847) 523-3978
FACSIMILE NO. (847) 523-2350